AMENDMENT

In the Claims

The following Listing of Claims, in which deleted text appears ~~struck through~~ and inserted text appears underlined, will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (cancelled).

2. (original) A fluorescently-labeled reagent comprising a reagent and an energy transfer dye, wherein the energy transfer dye comprises:

a xanthene donor dye capable of absorbing light at a first wavelength and emitting excitation energy in response thereto;

a 4,7-dichlororhodamine acceptor dye capable of absorbing the excitation energy emitted by the donor dye and fluorescing at a second wavelength in response thereto; and

a non-nucleosidic linker linking the 5- or 6-ring position of the donor dye to the 5- or 6-ring position of the acceptor dye,

and wherein the energy transfer dye is covalently linked to the reagent.

3. (original) The fluorescently-labeled reagent of Claim 2 in which the reagent is selected from the group consisting of proteins, polypeptides, polysaccharides, nucleosides/tides, oligonucleotides, oligonucleotide analogs, lipids, solid supports and organic and inorganic polymers.

4. (original) The fluorescently-labeled reagent of Claim 3 in which the reagent is a nucleoside/tide.

5. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 4 in which the energy transfer dye is covalently linked to the ~~nucleobase~~ base of the nucleoside/tide at the 4'-position of the donor or acceptor dye.

6. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 5 in which the energy transfer dye is covalently linked to the ~~nucleobase~~ base of the nucleoside/tide by way of an acetylenic amido or alkenic amido linkage.

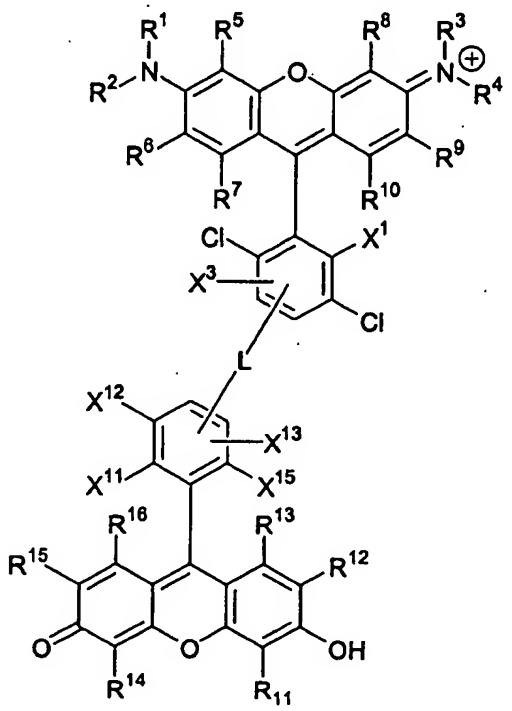
7. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 6 in which the acetylenic amido or alkenic amido linkage is selected from
-C≡C-CH_2-NH-C(O)-, 3-amino-l-propyn-l-yl,
-C≡C-CH_2-NH-C(O)-$(CH_2)_5$-C(O)-, -C=CH-C(O)-NH-$(CH_2)_5$-NH-C(O)- and
-C≡CH_2-O-CH_2-CH_2-NR-, where R is hydrogen, a protecting group or alkyl.

8. (Amended) The fluorescently-labeled ~~nucleoside/tide~~ reagent of Claim 4 in which the donor dye is a fluorescein.

9. (Amended) The fluorescently-labeled ~~nucleoside/tide~~ reagent of Claim 4 in which the linker has a backbone that is less than 9 atoms in length.

10. (Amended) The fluorescently-labeled ~~nucleoside/tide~~ reagent of Claim 4 in which the linker comprises a functional group selected from an alkene, a diene, an alkyne, a five membered ring having at least one unsaturated bond, a six membered ring having at least one unsaturated bond and a fused ring structure.

11. (Amended) The fluorescently-labeled ~~nucleoside/tide~~ reagent of Claim 4 in which the energy transfer dye comprises the structure:



wherein:

R^1, R^2, R^3 and R^4 are each, independently of one another, selected from hydrogen and alkyl, or alternatively R^1 and R^5, R^2 and R^6, R^3 and R^8 and/or R^4 and R^9 may be taken together with the atoms to which they are bonded to form a 5, 6 or 7-membered ring;

R^5, R^6, R^7, R^8, R^9 and R^{10} are each, independently of one another, selected from hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile, alkoxy, phenyl and substituted phenyl, or alternatively, R^6 and R^7 and/or R^9 and R^{10} may be taken together with the atoms to which they are bonded to form a benzo group;

X^1 and X^3 are each, independently of one another, selected from hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile and alkoxy;

L is the linker linking the donor and ~~acceptor, dyes~~ acceptor dyes;

R^{11}, R^{12}, R^{13}, R^{14}, R^{15} and R^{16} are each, independently of one another, selected from hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile, alkoxy, phenyl and substituted phenyl, or alternatively, R^{12} and R^{13} and/or R^{15} and R^{16} may be taken together with the atoms to which they are bonded to form a benzo group;

X^{11}, X^{12}, X^{13} and X^{15} are each, independently of one another, selected from hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile and alkoxy; and

R^8 or R^{14} comprises the attachment to the nucleoside/tide.

12. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 11 in which the nucleoside/tide is a 2'-deoxyribonucleoside.

13. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 11 in which the nucleoside/tide is a 2'-deoxyribonucleotide.

14. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 13 in which the 2'-deoxyribonucleotide is a 2'-deoxyribonucleoside-5'-triphosphate.

15. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 11 in which the nucleoside/tide is a terminating nucleotide.

16. (Amended) The fluorescently labeled ~~nucleoside/tide~~ reagent of Claim 15 in which the

terminating nucleotide is a 2',3'-dideoxynucleoside-5'-triphosphate.

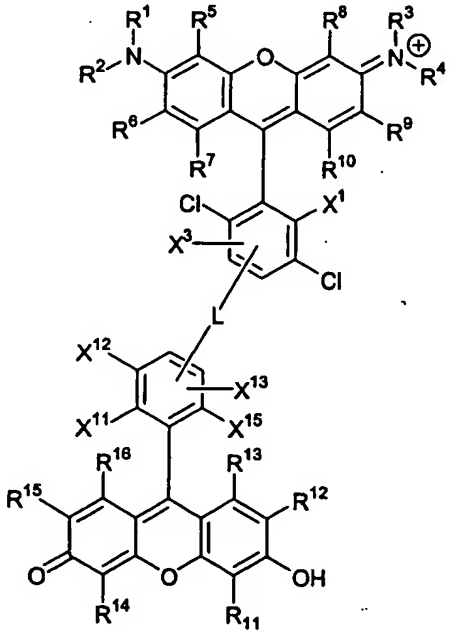
17. (original) A fluorescently-labeled reagent of Claim 3 in which the reagent is an oligonucleotide or oligonucleotide analog.

18. (Amended) The fluorescently-labeled ~~oligonucleotide or analog~~ reagent of Claim 17 in which the energy transfer dye is attached to the 5'-terminus of the oligonucleotide or analog.

19. (Amended) The fluorescently-labeled ~~oligonucleotide or analog~~ reagent of Claim 17 in which the energy transfer dye is attached to the 3'-terminus of the oligonucleotide or analog.

20. (Amended) The fluorescently-labeled ~~oligonucleotide or analog~~ reagent of Claim 17 in which the energy transfer dye is attached to a nucleobase of the oligonucleotide or analog.

21. (Amended) The fluorescently-labeled ~~oligonucleotide or analog~~ reagent of Claim 17 in which the energy transfer dye comprises the structure:



wherein:

R^1, R^2, R^3 and R^4 are each, independently of one another, selected from hydrogen and alkyl, or alternatively R^1 and R^5, R^2 and R^6, R^3 and R^8 and/or R^4 and R^9 may be taken together with the atoms to which they are bonded to form a 5, 6 or 7-membered ring;

R^5, R^6, R^7, R^8, R^9 and R^{10} are each, independently of one another, selected from

hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile, alkoxy, phenyl and substituted phenyl, or alternatively, R^6 and R^7 and/or R^9 and R^{10} may be taken together with the atoms to which they are bonded to form a benzo group;

X^1 and X^3 are each, independently of one another, selected from hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile and alkoxy;

L is the linker linking the donor and acceptor dyes;

R^{11}, R^{12}, R^{13}, R^{14}, R^{15} and R^{16} are each, independently of one another, selected from hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile, alkoxy, phenyl and substituted phenyl, or alternatively, R^{12} and R^{13} and/or R^{15} and R^{16} may be taken together with the atoms to which they are bonded to form a benzo group;

X^{11}, X^{12}, X^{13} and X^{15} are each, independently of one another, selected from hydrogen, fluorine, chlorine, bromine, iodine, carboxyl, alkyl, alkene, alkyne, sulfonate, sulfone, amino, ammonium, amido, nitrile and alkoxy; and

R^8 or R^{14} comprises the attachment to the oligonucleotide or analog.

22-31. (cancelled)